

A NEW BATHYAL SPECIES OF *CORALLIODRILUS*
(OLIGOCHAETA: TUBIFICIDAE) FROM
THE SOUTHEAST ATLANTIC

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Abstract.—*Coralliodrilus longiductus*, n. sp. (subfamily Phallodrilinae) is described from the continental slope west of Angola. It is the first species of *Coralliodrilus* from bathyal waters, and it is distinguished from its congeners by its slender, bipartite, and heavily muscular atria.

The genus *Coralliodrilus* was established by Erséus (1979) for *C. leviatriatus* from coral reef sands at Bermuda. Subsequently, seven additional species, four from the Great Barrier Reef (Erséus 1981), and three from Italy (Erséus, in press), have been described.

While examining a collection of oligochaetes from the "Atlantis II-42" cruise undertaken by the Woods Hole Oceanographic Institution in Walvis Bay (SE Atlantic), a new species closely related to the shallow-water species of *Coralliodrilus* was encountered. This note provides the description of this species.

The specimens were all stained in paracarmine and mounted whole in Canada balsam. The type-material has been deposited in the National Museum of Natural History (USNM), Smithsonian Institution, Washington, D.C.

Coralliodrilus longiductus, new species

Fig. 1

Holotype.—USNM 74635

Type-locality.—Continental slope west of Luanda, Angola, 09°05'S, 12°17'E to 08°56'S, 12°15'E, 1427-1643 m (AII-42 Sta. No. 202).

Paratypes.—USNM 74636-74639, 4 whole-mounted specimens from the type-locality.

Other material examined (author's collection).—Three whole-mounted specimens from the type-locality.

Description.—Length (2 complete, fixed specimens) 2.8-3.1 mm, 33-34 segments. Diameter at clitellum (slightly compressed worms), 0.14-0.18 mm. Prostomium small. Clitellum extending over ½X-XII. Somatic setae (Fig. 1A) bifid, with upper tooth thinner and shorter than lower. Bifids slender, 32-44 μm long, about 1 μm thick, 3 per bundle anteriorly, 2-3(4) per bundle in post-clitellar segments. Ventral setae of XI modified into penial bundles (Fig. 1B, ps), each of which contains 5-7 (generally 6) straight setae, 25-33 μm long, about 1.5 μm thick. Ectal tips of penial setae very narrow, single-pointed and curved, protruding into male invaginations. Male pores as paired invaginations (Fig. 1B, mi), located in line with ventral somatic setae, in posterior part of XI. Spermathecal pores paired in lateral lines, in anterior part of X.

Pharyngeal glands extending into VI. Male genitalia (all structures paired) (Fig. 1B): whole vas deferens not observed in available material, but appears shorter

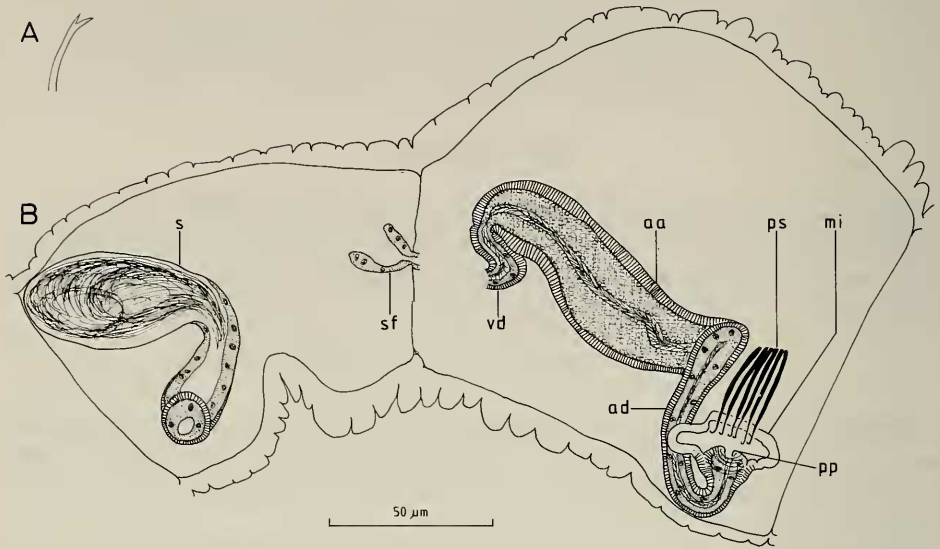


Fig. 1. *Coralliodrilus longiductus*: A, Free-hand drawing of somatic seta; B, Lateral view of spermatheca and male genitalia in segments X–XI. aa, atrial ampulla; ad, atrial duct; mi, male invagination; pp, pseudopenis; ps, penial setae; s, spermatheca; sf, sperm funnel; vd, vas deferens.

than atrium and is, ectally at least, muscular; vs entering apical, ental end of atrium; atrial ampulla, 90–115 μm long, 22–32 μm wide, with 3–4 μm thick outer lining of longitudinal muscles, and ciliated, granulated inner epithelium; atrial duct, up to 80 μm long, about 10 μm wide, muscular, terminating in small, muscular, protrusible pseudopenis in lateral wall of male invagination; prostate glands absent. Spermathecae (Fig. 1B, s) with ducts, 40–55 μm long, 13–25 μm wide, and very thin-walled ampullae, 50–85 μm long, 25–45 μm wide; sperm in random masses.

Remarks.—This new species shares the feature of bipartite atria with the Australian *C. atriobifidus* and *C. oviatriatus* (both described by Erséus 1981), and one of the new species from Italy (Erséus, in press). However, *C. longiductus*, n. sp. is distinguished from the other three by (1) its heavily muscular atria (atrial musculature thin in *atriobifidus* and *oviatriatus*, distinct but of varying thickness in the Italian species), and (2) its slender spermathecal ducts (these ducts are elaborate and longer than the spermathecal ampullae in *C. atriobifidus*, short and inconspicuous in *C. oviatriatus* and the Italian species).

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